

Claims

1 1. A method for updating base files previously stored on endpoint stations, said method comprising
2 the steps of:

3 generating a data integrity code based on the contents of the base file to be updated;
4 generating a delta file by applying a differencing algorithm to the base file to be updated and
5 to a modified form of the base file; and
6 creating a delta distribution package including the generated data integrity code and the
7 generated delta file.

1 2. A method as recited in claim 1 wherein the step of generating a delta file further includes the step
2 of writing one or more blocks into the delta file, each of said blocks comprising byte offsets
3 identifying the location of code sequence in the base file and a directive to copy the identified code
4 sequence into a modified form of the base file.

1 3. A method as recited in claim 2 wherein the step of generating a delta file further includes the
2 steps of writing one or more new byte sequences into the delta file along with one or more directives
3 defining where such new byte sequences are to be written into the modified form of the base file.

1 4. A method as recited in claim 3 including the additional step of distributing the delta distribution
2 package to one or more endpoint stations on which the base file is already installed.

1 5. A method as recited in claim 4 further including the steps of:

2 receiving the delta distribution package in at least one endpoint station in which the base file
3 is already installed;

4 comparing the data integrity code received in the delta distribution package to a data integrity
5 code associated with the base file already installed in the endpoint station;

6 if the data integrity codes match, updating the installed base file by retrieving the directives

7 and code sequences from the delta distribution package and executing the directives to rebuild the
8 installed base file into a modified form of that file.

1 6. A method for updating a base file previously installed at an endpoint system comprising the steps
2 of:

3 receiving a delta distribution package containing at least one data integrity code, one or more
4 byte offsets identifying the location of code sequences in the previously installed base file, one or
5 more new code sequences and one or more directives for utilizing either the new code sequences or
6 code sequences in the base file that are identified by the byte offsets;

7 comparing a data integrity code received in the delta distribution package to a data integrity
8 code already stored in the endpoint station; and

9 if the compared codes match, executing the directives received in the delta distribution
10 package to write new code sequences received in the delta distribution package and existing code
11 sequences identified in the base file into a modified form of the base file.

1 7. A system for updating base files previously stored on endpoint stations, said system comprising:

2 a code check character generating for generating a data integrity code based on the contents
3 of a base file to be updated;

4 a delta file generating for applying applying a differencing algorithm to the base file to be
5 updated and to a modified form of the base file to product a delta file; and

6 a delta distribution package generating for creating an update package including the generated
7 data integrity code and the generated delta file.

1 8. A system as recited in claim 7 wherein the delta file generator further code writing means for
2 writing one or more blocks into the delta file, each of said blocks comprising byte offsets identifying
3 the location of code sequence in the base file and a directive to copy the identified code sequence
4 into a modified form of the base file.

1 9. A system as recited in claim 8 wherein the delta file generating further includes code writing
2 means for writing one or more new byte sequences into the delta file along with one or more
3 directives defining where such new byte sequences are to be written into the modified form of the
4 base file.

1 10. A system for updating a base file previously installed at an endpoint station comprising:
2 a receiver for a delta distribution package containing at least one data integrity code, one or
3 more byte offsets identifying the location of code sequences in the previously installed base file, one
4 or more new code sequences and one or more directives for utilizing either the new code sequences
5 or code sequences in the base file that are identified by the byte offsets;
6 comparison logic for comparing the data integrity code received in the delta distribution
7 package to a data integrity code associated with the base file already installed in the endpoint station;
8 update logic responsive to a match between the compared data integrity codes to retrieve the
9 directives and code sequences from the delta distribution package and to execute the directives to
10 rebuild the installed base file into a modified form of that file.